Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-30. (cancelled)

31. (previously presented) In as laser device of the type having a laser head and a robot, the laser head being mounted to the robot, the laser head having a housing, a focal lens disposed within the housing, a light source in optical communication with the focal lens, a nozzle disposed within the housing, and a nozzle tip disposed within the nozzle having a sensor, the laser device having means for multiple operating modes wherein the improvement comprises:

means for determining a distance the laser head is operating at above a surface of a workpiece;

means for determining the position of the laser head at either an extended limit, a retracted limit, or an intermediate position above a workpiece;

means for stopping the operation of the laser device to avoid damage to the laser device in response to the means for determining when the head is at either the retracted limit, the extended limit, or at the intermediate distance above a surface of a workpiece;

means for sensing the operating mode of the laser device to determine a method of crash detection comprising the laser head and the nozzle tip sensor cooperating to signal the means for stopping; and

means for selecting and communicating the method of crash detection to the means for stopping.

32. (previously presented) The laser device of claim 31, wherein the operating mode of the laser device is selected from the group of parked, teach, run or hold.

33. (previously presented) The laser device of claim 31, wherein the means for stopping is operable to stop the laser device when the laser head is positioned between 3mm to about 6mm above the surface of the workpiece when the operating mode of the laser device is in the parked mode.

34. (previously presented) The laser device of claim 31, wherein the means for determining the distance the laser head is operating above a surface of a workpiece further comprises means for capacitive sensing.

35. (previously presented) The device of claim 31, wherein the housing comprises a first body portion and a second body portion, the first body portion being telescopable with the second body portion, the first body portion being translatable with the second body portion along a common axis.

36. (previously presented) The device of claim 35, further comprising means for determining the position of the telescopable housing at either an extended limit, a retracted limit, or an intermediate position between the limits.

37. (previously presented) In a laser head for a robotic unit of the type having a housing, a focal lens in the housing and a light source in optical communication with the focal lens, the housing having a nozzle with a tip, wherein the improvement comprises:

a device for adjusting a light path of a light beam directed from the light source onto a focal optic to center a focused laser beam formed by the focal optic coaxial with the tip, wherein the device is translatably supported by the housing and comprises a receiving optic for receiving the light beam, the receiving optic is translatably supported within the housing to adjust the light path of the light beam along a first axis of the housing to center the focused laser beam coaxial with the tip and is pivotally supported within the housing to adjust the light path of the light bam along a second axis of the housing to center the focused laser beam coaxial with the tip; and

the light source having an optical fiber supported by a fiber adapter, the optical fiber being positioned to direct a light beam into the housing to the receiving optic, the optical fiber being translatable with the receiving optic to maintain a substantially constant distance between the optical fiber and the receiving optic.

38. (currently amended) A laser head, the laser head being mountable to a robotic unit, the laser head having a housing, a focal lens in the housing and a light source in optical communication with the focal lens wherein the improvement comprises:

the housing being a telescopable housing;

a telescopable assist gas delivery tube, wherein the assist gas delivery tube is disposed with the telescopable housing; and

means for adjusting a light path within the housing of a light beam from the light source wherein the assist gas exits the housing to assist the light beam to process material.

39. (previously presented) The laser head of claim 38, further comprising an elongated nozzle attached to the housing.

40. (previously presented) The laser head of claim 38, wherein the means for adjusting further comprises a receiving optic, the receiving optic being translatably supported within the housing to adjust a light path of a light beam along a first axis of the housing and pivotally supported to adjust the light path of the light beam along a second axis of the housing onto the focal lens.

41. (previously presented) A method of operating a robotic laser material processing device having a robotic member and a laser head, while avoiding defective laser machining of a workpiece caused by an undesirable laser beam impinging on the workpiece or damage caused by a crash between the device and an object including the workpiece, a fixture, or other structure in a path of the device, the method comprising:

activating, through the use of robotic control program, a first mode of operation so as to control the device during a first time interval when a surface of a workpiece is not being tracked in relation to changing topography of the workpiece, the first mode of operation having an associated crash protection tolerance defined by a predetermined minimum distance between the object and a location of the device;

measuring a distance of the head relative to a surface of an object to obtain a distance measurement;

comparing the distance measurement with the predetermined minimum distance;

generating a signal to communicate a crash condition whenever the distance measurement is less than the predetermined minimum;

detecting, during the operation of the unit in the mode, a position of the laser head relative to a travel limit; and

generating, based upon the detected position relative to a limit, a signal to communicating a crash condition so that the operation of the unit is stopped if the laser head is within a predetermined proximity to the limit.

42. (previously presented) The method of claim 41, wherein the activated mode is one of a plurality of modes, each mode having a crash protection tolerance.

43. (previously presented) The method of claim 42, wherein the at least two modes have distinct-crash protection tolerances.

44. (previously presented) The method of claim 41, wherein the tolerance for a mode includes zero distance between an object and a location relative to the head, whereby a surface of the device may contact an object during operation in the mode without generation of a signal to communicating a crash, and wherein operation in the mode continues without undesirable damage.

45. (previously presented) The method of claim 41, wherein the activated mode is a run, parked, teach, or hold mode.

46. (Previously presented) The method of claim 41, wherein the mode of operation is a hold mode, and further comprising processing the workpiece with a laser beam during the hold mode of operation.

47. (previously presented) The method of claim 46, wherein processing the workpiece comprises forming a hole, cutting an edge, or welding.

48. (previously presented) The method of claim 41, wherein the head comprises a telescopic housing, and further comprising a step of controllably extending or retracting the head during the mode of operation.

49. (previously presented) The method of claim 41, wherein the laser head comprises a housing, a nozzle disposed within the housing, and a nozzle tip disposed within the nozzle having a sensor, and wherein: (a) the step of measuring comprises detecting

a signal from the nozzle tip sensor; and (b) a step of generating signal comprises communicating a crash condition to a controller based on cooperation of the nozzle tip sensor and head.

50. (previously presented) The method of claim 41, wherein the laser head comprises a housing having first and second body portions, the first body portion being telescopic with the second body portion, the first body portion being translatable within the second body portion, and wherein a step of determining further comprises detecting a signal representative of an extended limit, retracted limit, or intermediate position of the telescopic housing between the limits.

51. (previously presented) The method of claim 41, wherein the mode is a parked mode and the predetermined minimum distance is in a range of about 3-6 millimeters.

52. (previously presented) The method of claim 41, wherein the predetermined minimum distance is in a range of about 0-0.1 millimeters.

53. (previously presented) The method of claim 41, wherein the predetermined minimum distance is in the range of about 0-0.5 millimeters.

54. (previously presented) The method of claim 41, further comprising the steps of:

activating a run mode of operation to track the surface of the workpiece in relation to changing topography and to process the workpiece with a laser beam, the run mode operation to occur in a second time interval separate from the first time interval;

detecting, during operation of the unit in the run mode, a position of the laser head relative to a travel limit; and

generating, based upon the detected position relative to a limit, a signal to communicate a crash condition to a controller so that the operation of the unit is stopped if the laser head is within a predetermined proximity to a limit.

55. (previously presented) The method of claim 54, wherein tracking the workpiece is carried out with the distance sensor used in the step of measuring.

56. (new) In a laser head for a robotic unit of the type having a housing with a tip, a focal lens in the housing, a light source in optical communication with the focal lens, the improvement comprising:

a device for adjusting a path of a light beam directed from the light source onto a focal optic in order to compensate for variations in mechanical and optical components of the laser head or the light source, to center a focused laser beam formed by the focal optic coaxial with the tip without the typical need of having an adjustable focal optic, wherein the device includes at least one of the following:

the device is translatably supported by the housing and comprises a receiving optic for receiving the light beam, the receiving optic is translatably supported within the housing to adjust the path of the light beam along a first axis of the housing to center the focused laser beam coaxial with the tip and is pivotally supported within the housing to adjust the path of the light beam along a second axis of the housing to center the focused laser beam coaxial with the tip; and

the device includes the light source having an optical fiber supported by a fiber adapter, the optical fiber being positioned to direct a light beam into the housing to the receiving optic, the optical fiber being translatable with the receiving optic to maintain a substantially constant distance between the optical fiber and the receiving optic.

57. (new) The laser head of claim 56, further comprising a telescopable process assist gas delivery tube, wherein the process assist gas delivery tube is disposed within the telescopable housing, wherein the process involves the interaction of the laser beam and the workpiece in combination with the process assist gas.

58. (new) The laser head of claim 56, further comprising an elongated nozzle attached to the housing.

59. (new) The laser head of claim 56, wherein the housing is a telescopable housing.